

**FINAL NAVAL AIR STATION (NAS) ALAMEDA RESTORATION ADVISORY BOARD
MEETING SUMMARY**

Building 1, Suite #140, Community Conference Room
Alameda Point
Alameda, California

Tuesday, February 6, 2001

ATTENDEES

See attached list.

MEETING SUMMARY

I. Approval of Minutes

Michael Torrey, Community Chairperson, called the meeting to order at 6:30 p.m. and asked for comments on the Restoration Advisory Board (RAB) meeting minutes from January 2, 2001. The following comments were made:

- On Page 2, first paragraph, "Environs" should be replaced with "Environ Corporation."
- Mary Sutter stated that she liked the inclusion of the acronym definitions.

Mr. Torrey moved to approve the minutes with the corrections, and no objections were made.

II. Co-Chair Announcements

Mike McClelland announced that Tetra Tech EM Inc. (TtEMI) prepared the January meeting minutes and will also prepare the February and March meeting minutes.

The U.S. Department of the Navy (Navy), the Department of Toxic Substances Control (DTSC), and Regional Water Quality Control Board signed the Alameda Annex Marsh Crust Remediation Action Plan/Record of Decision (RAP/ROD). Although the U.S. Environmental Protection Agency (EPA) concurs with the RAP/ROD, they will not sign it. Because DTSC is the lead agency, EPA will issue a letter of concurrence instead.

EPA has signed the Alameda Point Federal Facility Agreement (FFA), and the Navy is currently preparing to sign it. The Site Management Plan (SMP) or schedules will be finalized within 30 days after the FFA is signed, and a 30-day public review period will follow submittal of the SMP. A copy of the FFA will be located in the repository, and the Navy will distribute a copy to each RAB member.

Mr. Torrey distributed various correspondence and documents to the RAB.

Documents from Brooks Air Force Base will be placed in the library.

An invitation to the 2001 Northern California Opportunities in Contracting Conference was received from The East Bay Conversion and Reinvestment Commission. The conference will be held on March 21, 2001. A copy of the letter and attached RSVP form will be included in the mid-monthly mailing. The preregistration fee of \$50 can still be paid by bringing the payment to the office of Charlene Washington.

James Leach, Jo-Lynne Lee, and Glen Star have excused absences. Robert Berges will be resigning after this meeting.

III. Engineering Evaluation/Cost Analyses (EE/CA) Overview

Glenna Clark, Navy RPM, and Alan Driscoll, TtEMI, presented an overview of the Action Memoranda Addenda and EE/CAs that will be submitted for public review. A handout was provided. The following four EE/CAs have been prepared:

- Site 5
- Site 14
- Sites 9, 11, 16, and 21
- Sites 4 and 5

The EE/CAs were submitted to the agencies for review on January 5, 2001. Replacement pages for the EE/CA for Sites 9, 11, 16, and 21 will be submitted shortly. The Site 15 Action Memorandum Addendum was submitted in December 2000, and the Site 5 Action Memorandum Addendum is scheduled for submittal on February 28, 2001.

The Site 5 Action Memorandum Addendum addresses radium 226, which was used to paint luminescence dials. The radium has migrated to the storm drains; therefore, the Navy is proposing to clean and/or replace the affected sections of storm drain. Cleaning would include pressure washing the storm drain then resurveying it to determine that it is radiation-free. A portion of an abandoned storm drain is under the load-bearing wall of a building; therefore, that portion would be cleaned instead of being removed. This removal is a continuation of the removal started in 1999 that was not completed because of lack of funds.

The Site 15 Action Memorandum Addendum addresses lead and polychlorinated biphenyls (PCB) in soil. The following three removal alternatives were evaluated: (1) no action, (2) excavation and treatment, and (3) excavation and disposal. The Navy is proposing to excavate and dispose of the soil off-site. Ms. Cassa clarified that the Site 5 Action Memorandum Addendum is a continuation of the removal, which stopped due to lack of funds. The Site 15 Action Memorandum Addendum, on the other hand, addresses additional contamination that was discovered on property that was originally believed not to belong to the Navy

The Site 5 EE/CA addresses cadmium in soil. Cadmium is a by-product of the former Plating Shop. The objective of the removal is to be protective of human health in a cost-effective way. The following three removal alternatives were evaluated: (1) no action, (2) excavation and on-or off-site disposal, and (3) excavation, solidification or stabilization, and disposal. The Navy is proposing to excavate and dispose of the soil offsite¹. Brad Job explained that solidification or stabilization would involve adding a product, such as cement, to the soil so that leaching of

¹ There is an error on the Site 5 EE/CA slide included in the handout. The proposed technology should be excavation and off-site disposal.

cadmium from the soil would be retarded. Solidification or stabilization is required by landfills when contaminant concentrations exceed their acceptance levels. The Navy has not determined which landfill will be used; possibilities are Altamont (Class II) and Kettleman (Class I).

The Site 14 EE/CA addresses dioxins in soil. Six removal areas are proposed, which include subsurface soil in the berm surrounding the fire training area and five aboveground areas surrounding the berm (see the figure included in the handout). The following three removal alternatives were evaluated: 1) no action, 2) excavation and disposal, and 3) excavation, solidification or stabilization, and disposal. The Navy is proposing to excavate and dispose of the soil off site.

The EE/CA for Sites 9, 11, 16, and 21 addresses chlorinated solvents and benzene in the aqueous phase in groundwater. Benzene is a concern at Site 11, 16, and 21, not Site 9. A total of five removal areas are proposed (see the figure included in the handout for specific removal areas). The following four treatment alternatives were evaluated: (1) no action, (2) enhanced bioremediation, (3) in situ chemical oxidation, and (4) air sparging and soil vapor extraction (SVE). Enhanced bioremediation involves injecting nutrients into the groundwater to expedite microbial degradation of the chlorinated solvents and benzene. In situ chemical oxidation involves injecting an oxidant into the groundwater to expedite the degradation of chlorinated solvents and benzene, then the by-products may be extracted. Air sparging and SVE involves injecting air into the groundwater, which volatilizes the chlorinated solvents and benzene, and then the volatile organic compound (VOC) gasses are extracted and treated. The Navy is proposing to treat the groundwater by conducting air sparging and SVE for an 18-month period. It is hoped that an oily phase of chlorinated solvents and benzene is not present in the groundwater and that this removal will also be the final remedy.

The EE/CA for Sites 4 and 5 addresses chlorinated solvents in the dense, nonaqueous-phase liquid (DNAPL) phase in groundwater. A total of seven removal areas are proposed (see the figure included in the handout for specific removal areas). The following four treatment alternatives were evaluated: (1) no action, (2) in situ chemical oxidation, (3) steam injection and SVE, and (4) electrical heating and SVE. Steam injection involves using steam to heat the subsurface and volatilize contaminants, which are collected and treated. Electrical heating and SVE involves using electricity to heat the subsurface and volatilize contaminants, which are removed by a vacuum system. The Navy is proposing to treat the groundwater by conducting electrical heating and SVE for a 12-month period. It is believed that a significant amount of contaminant mass will be removed in this time. Remaining contaminants would be addressed in the ROD for the site. Mr. Job stated that a pilot study for steam injection was performed at Site 5 was quite successful and asked why electrical heating, an unproven technology, was selected. Because of the heterogeneity of the soil, the Navy expects electrical heating to be more successful. Mary Rose Cassa stated that the presence of light, nonaqueous-phase liquid and the commingling of the plume with petroleum products may have increased the success rate of the steam injection pilot study. A discussion ensued about electricity costs.

Schedules for the Sites 5 and 15 Action Memoranda Addenda and first removal actions associated with the EE/CAs were presented. The Site 5 removal action for radium 226 is currently scheduled to begin on December 28, 2001, and the Site 15 removal action for lead and PCBs is currently scheduled to begin on August 6, 2001. The first removal actions associated with the EE/CAs are currently scheduled to begin on July 5, 2001. Mr. Torrey stated that the commencement of the removal actions seemed far away. Ms. Sutter asked if the budget for Alameda Point included the removal actions. Ms. Clark responded that the soil removals would

be funded this week, the Site 5 radium 226 removal has not been funded, and the groundwater removals have already been funded.

IV. Operable Unit (OU)-1 and -2 Data Gap Sampling Workplan Review

Greg Lorton, Navy RPM, presented an overview of the OU-1 and OU-2 Data Gap Sampling Workplan, which is in the midst of a 60-day agency review. Two handouts were provided. Mr. Lorton began with a list of commonly used acronyms and their definitions, then presented the data gaps and proposed sampling locations for each site.

OU-1 includes Sites 6, 7, 8, 14, 15, and 16. Four of these sites (Sites 6, 14, 15, and 16) are addressed in the data gap sampling workplan. Site 6 sampling addresses VOC and (TPH) groundwater data gaps. Major concerns are benzene and chlorinated solvents in groundwater. Data gaps for VOCs and total petroleum hydrocarbons (TPH) in groundwater and dioxins in the soil, from the Fire Training Area, are the focus of Site 14 sampling. Step-out sampling, to delineate the dioxins, is proposed. Lead is not the focus of the Site 14 investigation, because it is present at concentrations much lower than that of dioxins. Sampling at Site 15, the Transformer Storage Area, addresses PCBs and lead in soil. During the last sampling event, PCBs and lead were detected in soil outside of the fence, so sampling outside of the fence is proposed. Data gap sampling for Site 16 addresses chlordane in soil and dichlorobenzene in groundwater. Chlordane has been detected in soil beneath a tank. The data gap sampling will confirm and characterize the extent of the chlordane soil contamination and confirm an isolated hit of dichlorobenzene in groundwater. The storage area is located between the high school and Site 16.

OU-2A includes Sites 9, 13, 19, 22, and 23. Three of these sites (Sites 9, 19, and 23) are addressed in the data gap sampling workplan. Site 9, Building 410, was a paint stripping shop, and solvents have been detected in groundwater. Determining the western extent of the plume is the focus of data gap sampling for this site. VOCs have been detected in groundwater beneath Site 19, and Site 4 is believed to be the source. Step-out sampling is proposed to delineate the plume further. Site 23 was a refueling station, and spills were not always contained. Sampling will focus on the TPH, which is present in groundwater.

OU-2B includes Sites 3, 4, 11, and 21, and all of the sites are addressed in the data gap sampling workplan. Site 3 sampling addresses TPH and VOCs in groundwater and lead in soil. Better characterization of potential DNAPL, TPH, and VOCs in groundwater and cadmium and chromium in soil is the focus of the Site 4 sampling. Chromium and cadmium are from the plating shop associated with Building 360. Sampling at Sites 11 and 21 addresses TPH and VOCs in groundwater. The TPH problem at Site 21 is believed to be associated strictly with petroleum. It is also believed that DNAPL probably is present in groundwater beneath Sites 11 and 21. Groundwater is generally 6 to 10 feet deep; however, the water column in the area impacted by VOCs is about 90 feet. To date, two phases of VOCs have not been sampled, but the concentrations suggest that saturation has occurred. Sampling with a sonic drill probe is proposed to locate the DNAPL.

OU-2C centers around Site 5 and includes Sites 5, 10, and 12. Data gap sampling is proposed for Sites 5 and 10. Data gaps at Site 5 include potential DNAPL, TPH, and VOCs in groundwater and cadmium in soil. Chlorinated solvents are the focus of Site 5. The depth of the DNAPL needs to be determined, and it is expected to be above the Bay Mud. A concern exists about

penetrating the layer during sampling and creating a conduit. Sampling at Site 10 is an extension of VOC sampling at Site 5.

The data gap sampling is approximately 60 percent of the original remedial investigation (RI) sampling, and a lot of the data will be collected at Sites 4 and 5. In addition, to further characterization of the extent of contamination, the data gap sampling will be used to support proposed removal actions and will further the remedial designs.

V. Project Teams

OU-4

The OU-4 Site 2 RI Report was discussed. Diane Behm asked the agencies if they agreed with the report. Phillip Ramsey stated that EPA has not given the Navy comments yet. U.C. Davis will be reviewing it for the Audubon Society. Mr. Job stated that he has concerns with the report.

Site 25

Ms. Sutter asked to be removed from the team.

Administration

Mr. Berges will need to be replaced.

OU-1 and OU-2

Ms. Sutter reported for Jo-Lynne Lee that little activity is occurring now. Upcoming activities include data gap sampling and removal actions.

Environmental Baseline Survey

The final report is due this month. Ms. Lee requested through Ms. Sutter that the remedial project managers present the final findings to the RAB, possibly at the April 2001 RAB meeting.

OU-3

John Roullier will be joining the team. Ms. Sutter reported that radium is going to be removed from Site 1 to a depth of 20 inches. The removal is expected to begin in another month. Three volumes of the RI Addendum will be issued. Kevin Reilly and Ms. Sutter attended the Alameda Reuse and Redevelopment Authority Meeting on January 29, 2001. The City of Alameda discussed its grant to consider the use of dredge material from Seaplane Lagoon for contouring of the golf course. It would not be used as the top layer of the golf course. The public process is scheduled to begin in March. Mr. Torrey expressed concern about exposure to toxins.

Petroleum

Mr. Job stated that the Petroleum Corrective Action Plan (CAP) documents are beginning to be issued. The CAP for the Engine Test Cells (Building 397) is his highest priority.

VI. Base Realignment and Closure Cleanup Team (BCT) Activities

Mr. Ramsey stated that the BCT monthly tracking meeting was held on January 16, 2001, and the semimonthly conference calls were held on January 11 and 25, 2001. The BCT meeting focused on the EE/CAs, and Regenesi presented a proposal for an enhanced bioremediation study at Site 4. The BCT will allow Regenesi to perform the study.

A TPH strategy meeting was held on January 30, 2001.

VII. Community and RAB Comment Period

Mr. Torrey asked when the cleanup process is expected to be completed. Mr. McClelland responded that this information is included in the schedules, which will be distributed after the FFA is signed. According to the schedules dated November 13, 2000, and distributed to the RAB, the cleanup process would be completed in 2006.

Diane Behm asked about funding. Mr. McClelland responded that all first quarter funding has been awarded and FFA schedules are the first priority.

A discussion ensued about the fluorescent light fixtures located outside of Yard B13. They are from an unknown origin, and Steve Edde is working with the City of Alameda to remove them. Half of the fixtures are marked "no PCBs," and the others are unmarked. Mercury does not appear to be a concern. No fluorescent bulb tubes were present.

No known damage has occurred from the recent earthquake.

Warner Brothers, to prevent viewing of a chase scene that was being filmed, installed the walls along Estuary Park.

The meeting was adjourned.

ATTACHMENT A

**NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING AGENDA
FEBRUARY 6, 2001**

(One Page)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

6 FEBRUARY, 2001 6:30 PM

ALAMEDA POINT – BUILDING 1 – SUITE 140

COMMUNITY CONFERENCE ROOM

(FROM PARKING LOT ON W MIDWAY AVE, ENTER THROUGH MIDDLE WING)

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 - 6:35	Approval of Minutes	Michael-John Torrey
6:35 - 6:45	Co-Chair Announcements	Co-Chairs
6:45 - 7:20	EE/CA Overview	Glenna Clark
7:20 - 7:50	OU-1 & OU-2 Data Gap Sampling Workplan Review	Greg Lorton
7:50 - 8:10	Project Teams, Round the Table	Team Leaders
8:10 - 8:20	BCT Activities	Phillip Ramsey
8:20 - 8:30	Community & RAB Comment Period	Community & RAB
	RAB Meeting Adjournment	
8:30 - 9:00	Informal Discussions with the BCT	

ATTACHMENT B

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING SIGN-IN SHEETS

(Four Pages)

ATTACHMENT B – SIGN-IN SHEETS

06 FEBRUARY 2001 RESTORATION ADVISORY BOARD MEETING SUMMARY

**THE ABOVE IDENTIFIED ATTACHMENT IS NOT
AVAILABLE.**

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NAVFAC SOUTHWEST TO LOCATE THIS
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QUESTIONS MAY BE DIRECTED TO:

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ATTACHMENT C

NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS

Tetra Tech EM Inc. 2001. "Alameda Point Removal Action Overview." February 6.

The East Bay Conversion. 2001. Letter Regarding 2001 Northern California Opportunities in Contracting Conference. From David K. Wilson. To Michael Torrey, B.R.A.G. January 26.

U.S. Department of the Navy (Navy). 2001. "Data Gap Sampling Operable Units 1, 2A, 2B, and 2C." February 6.

Navy. 2001. "Data Gap Sampling Figures." February 6.

ATTACHMENT C – HANDOUT MATERIALS

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